



National Data Network Consortium

ABS, AIHW, ANZLIC, ARACY, Centrelink, CSIRO, DEST, DoHA, DoTaRS, OSDM, Office of the Privacy Commissioner, Telethon Institute of Child Health Research, NSW Health, Qld Treasury, Vic CIO, SA Cabinet Office.

Statement of Capability for ANDS

The National Data Network (NDN) Consortium strongly supports the ANDS initiative and the NDN Interim Governing Board endorses the NDN management offering participation in ANDS proposals related to NDN capabilities. The NDN currently plays a leading role in developing an environment for the secured sharing of information resources related to statistical and administrative data, building the required stakeholder networks and developing agreed standards. The NDN has the capacity to be immediately developed beyond these objectives to support the broader ANDS requirements as the technology supports any information resource and can also be distributed internationally.

The NDN is a national distributed network using the hub and spoke network architecture. The network consists of a centralized management server(s) that holds a catalogue of information resources and a distributed set of custodian owned and operated nodes. Information resources can be documents, datasets, video/audio files, analysis and presentation tools or other web services. They can have visibility and access restrictions placed on them by custodians who retain control of their resources.

NDN Discovery metadata provides management of information assets as it ensures custodians identify and catalogue these according to agreed standards. The NDN Metadata Working Group is an important NDN collaboration which guides NDN metadata development. Collaborations across business and technical fields have been a foundation of NDN development. NDN collaborations have the potential to support the required outcomes against ANDS objectives. For example work with Macquarie University and their Meta Access Management System (MAMS) on Shibboleth technology will enable this to be implemented into the NDN giving organisations the capacity to use federated identity management.

Minimising costs by using open source software and methodologies makes broad participation in the network possible and encourages development collaborations. A collaboration with the United States Census Bureau is investigating which aspects of the NDN can be used to facilitate their DataFerrett/DataWeb service. Another collaboration is underway with Queensland Treasury Department related to the implementation of a Creative Commons licensing framework. The non-exclusive development of the NDN would provide ANDS with the capability to provide data access services at both the individual and organisational level, support the distribution of web services and encourage immediate broad custodian participation.

Current NDN capabilities

Metadata catalogue:

Basic Metadata regarding Information Resources

Metadata and asset management:

Discovery Metadata (Dublin Core Extended Metadata Set), Quality Metadata (OECD and ISO 19000 Quality Metadata Standards, Term and Use Conditions, Definitional Metadata, Object Specific Metadata (Metadata that follows a Standards based schema registered to the NDN).

Search capabilities of the catalogue:

Basic Search capabilities over the Information Resource's Discovery Metadata

Access and control:

Provides 3 levels of visibility for Searching, Acquisition and Viewing of Object specific metadata

Provides for federated services:

Provides for the exposure of Federation level services to the network

Custodian provided services:

Provides capability to allow Custodians to provide services to the network

Community portals:

Provides communities the ability to share information resources through a community area with discussion forums

NDN capabilities in Development

Federated search capabilities:

Provides the capability through SRU/SRW to search across other affiliated networks

User management using a federated identity management system:

Shibboleth Identity Management and access control

Centralized warehouse and data:

Provides warehousing for information resources without a relevant custodian facility or where a custodian without the capacity requires 24/7 exposure

Schema Registry:

Provides a facility for the registration of schemas that define Object Specific Metadata standards

Interoperability Services:

Provides interoperability with other networks such as ASDD